

REMARKS / ARGUMENTS

Claims 1-12 are pending in this application. By this Amendment, Applicants amend claims 1 and 2 and cancel claim 13.

Claim 13 has been canceled since this claim is directed to a non-elected invention. Applicants reserve the right to file a Divisional Application in order to pursue prosecution of non-elected claim 13.

Applicants appreciate the Examiner's indication that claims 2-4 would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims.

Applicants greatly appreciate the Examiner extending the courtesy of the personal interview on June 28, 2006. During the personal interview, the Examiner and Applicants' representative discussed alternative language for the term "producing" in the last three lines of claim 1 to overcome the rejection under 35 U.S.C. § 112, first paragraph. Furthermore, the Examiner indicated that the proposed amendment of "by a melt quenching process" to claim 1 might be sufficient to overcome the rejection of claim 5 under 35 U.S.C. § 112, first paragraph, and the prior art rejection of claim 1.

Claims 1 and 5-12 were rejected under 35 U.S.C. § 112, first paragraph, for allegedly not enabling one of ordinary skill in the art to use the invention commensurate in scope with the claims. The Examiner alleged that the specification does not reasonably provide enablement for the claimed process step of "producing a compound phase ..." as recited in the last three lines of claim 1 and in claim 5. In particular, the Examiner alleged that the last three lines of claim 1 encompass any and all methods of treating the solidified alloy so as to provide the recited crystal structure and that claim 5 reads on producing the crystal structure by a direct casting method.

Although Applicants do not necessarily agree with the rejection of claim 1, Applicants have amended claim 1 to recite "thermally treating the rapidly solidified alloy to produce a compound phase." Applicants respectfully submit that the scope of claim 1, as amended, is now enabled by Applicants' originally filed specification. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 1

under 35 U.S.C. § 112, first paragraph.

With respect to claim 5, Applicants have amended parent claim 1 to clarify that the crystal structure is produced by “rapidly cooling and solidifying the melt alloy **by a melt-quenching process**” (emphasis added). Accordingly, claim 5 cannot read on producing the crystal structure by a direct casting method. Support for this amendment to claim 1 is found in, for example, paragraphs [0037] and [0044] in Applicants’ originally filed specification. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 5 under 35 U.S.C. § 112, first paragraph.

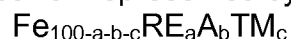
Claims 1 and 6-12 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over Applicant’s Admitted Prior Art (AAPA). Applicants respectfully traverse the rejection of claims 1 and 6-12.

Claim 1 has been amended to recite:

A method of making a magnetic alloy material, the method comprising the steps of:

preparing a melt of an alloy material having a predetermined composition;

rapidly cooling and solidifying the melt of the alloy material by a melt-quenching process to obtain a rapidly solidified alloy having a composition represented by the general formula:



where RE is at least one rare-earth element that is selected from the group consisting of La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er and Tm and that includes at least about 90 at% of La; A is at least one element that is selected from the group consisting of Al, Si, Ga, Ge and Sn; TM is at least one transition metal element that is selected from the group consisting of Sc, Ti, V, Cr, Mn, Co, Ni, Cu and Zn; and mole fractions a, b and c satisfy $5 \text{ at}\% \leq a \leq 10 \text{ at}\%$, $4.7 \text{ at}\% \leq b \leq 18 \text{ at}\%$ and $0 \text{ at}\% \leq c \leq 9 \text{ at}\%$, respectively; and

thermally treating the rapidly solidified alloy to produce a compound phase having an NaZn_{13} -type crystal structure in at least about 70 vol% of the rapidly solidified alloy. (emphasis added)

With the unique combination and arrangement of features recited in Applicants’ claim 1, including the step of “rapidly cooling and solidifying the melt of the alloy material

by a melt-quenching process to obtain a rapidly solidified alloy,” Applicants have been able to provide a method of making an LaFe_{13} -based magnetic alloy material much more efficiently than the conventional process and wherein the rapidly solidified alloy can be pulverized easily (see, for example, paragraph [0022] in Applicants’ originally filed specification).

The Examiner alleged that paragraphs [0002] and [0003] in Applicants’ specification disclose a prior art method of making the alloy by direct casting, and Applicants’ claim language of “rapidly cooling and solidifying” (claim 1, line 5) does not distinguish over the direct casting of AAPA. Applicants respectfully disagree.

Claim 1 has been amended to recite the step of “rapidly cooling and solidifying the melt of the alloy material **by a melt-quenching process** to obtain a rapidly solidified alloy” (emphasis added). As discussed above, support for this step is found, for example, in paragraphs [0037] and [0044] in Applicants’ originally filed specification. As the Examiner is well aware, melt-quenching is different from direct casting. Thus, AAPA clearly fails to teach or suggest the step of “rapidly cooling and solidifying the melt of the alloy material by a melt-quenching process to obtain a rapidly solidified alloy,” as recited in Applicants’ claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over AAPA.

In view of the foregoing amendments and remarks, Applicants respectfully submit that claim 1 is allowable. Claims 2-12 depend upon claim 1, and are therefore allowable for at least the reasons that claim 1 is allowable.

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

To the extent necessary, Applicants petition the Commissioner for a ONE-month extension of time, extending to July 1, 2006, the period for response to the Office Action dated March 1, 2006.

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The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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